

Appl. No.: 10/688,712
Amendment dated September 15, 2005
Responsive to Office Action of May 19, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve, comprising the steps of:
positioning a device within the valve, the device being conformable for conforming to the coaption axis of the valve and moveable in response to opening and closing of the valve; and
observing the device when the valve is closed, to determine the spatial orientation of the coaptation axis for evaluating valve function.
2. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve as in claim 1, wherein the positioning step comprises transluminally positioning.
3. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve as in claim 2, comprising the steps of transluminally advancing the device through the aortic valve and into the mitral valve.
4. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve as in claim 2, comprising the steps of transluminally advancing the device into the right atrium and across the atrial septum into the mitral valve.
5. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve as in claim 1, wherein the positioning step comprises positioning a plurality of radiopaque markers within the valve.

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6-9. (cancelled)

10. (Currently Amended) A method of determining the coaptation axis of the leaflet orientation of a mitral valve, comprising the steps of:

advancing the distal end of a catheter through the left ventricle to a position adjacent the mitral valve;

deploying a radiopaque target from the distal end of the catheter to a location within the mitral valve, the radiopaque target being sufficiently conformable to reconfigure in response to opening and closing of the mitral valve; and

observing the alignment of the radiopaque target in response to closing of the mitral valve.

11. (Currently Amended) A method as in claim 10, wherein the ~~deploying step~~ radiopaque target comprises deploying a plurality of radiopaque markers.

12. (Currently Amended) A method as in claim 11, further comprising a plurality of wires and wherein the deploying step comprises deploying a plurality of radiopaque markers are disposed on the plurality of wires.

13. (Currently Amended) A method as in claim 11, further comprising an expandable basket and wherein the deploying step comprises deploying an plurality of radiopaque markers are disposed on the expandable basket.

14. (Withdrawn) A leaflet orientation device, for determining the coaptive axis of a valve, comprising:

an elongate, flexible tubular body, having a proximal end and a distal end; and a conformable radiopaque target carried by the distal end;

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wherein the target is conformable in response to closing of the valve to align with the coaptive edges of valve leaflets.

15. (Withdrawn) A leaflet orientation device as in claim 14, wherein the conformable target comprises a plurality of wires.

16. (Withdrawn) A leaflet orientation device as in claim 14, wherein the conformable target comprises a pig tail support.

17. (Withdrawn) A leaflet orientation device as in claim 14, wherein the conformable target comprises a collapsible basket.

18. (Withdrawn) A leaflet orientation device as in claim 14, wherein the conformable target is axially movable with respect to the tubular body.

19. (Withdrawn) A leaflet orientation device as in claim 14, wherein the conformable target comprises a balloon.

20. (Withdrawn) A leaflet orientation device as in claim 14, wherein the conformable target is movable between a retracted position within the catheter for transluminal advance and an extended position for determining valve leaflet orientation.

21. (Currently Amended) A method of ~~determining the coaptation configuration~~ assessing the functionality of a valve, comprising the steps of:

providing a conformable target, the conformable target having a primary axis and configured to conform to the coaption axis of the valve during opening and closing of the valve;

positioning the conformable target ~~in the path of a valve leaflet~~ within the valve; and

visualizing the target along a viewing axis which is transverse to the primary axis, in the vicinity of the valve leaflet; and

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observing the orientation of the target when the valve is open and closed for assessing the functionality of the valve.

22. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve as in Claim 1, comprising positioning an implant within the coronary sinus in a preselected relationship to the device.

23. (Currently Amended) A method of ~~determining the coaptation axis~~ assessing the functionality of a heart valve as in Claim 22, wherein the implant is positioned such that it applies pressure on the ~~P2~~ a posterior leaflet of the mitral valve.